





Commercial reuseable suborbital vehicles provide roughly 4 minutes of microgravity. Different approaches--unpiloted, piloted, and multi passenger offer unprecedented flexibility and options for research.

CRUSR

FAST

EFFICIENT

FLEXIBLE

SAFE

COST EFFECTIVE

NEW WAYS OF DOING BUSINESS

NEW SPACE PLATFORMS

4 MINUTES OF WEIGHTLESSNESS

CRuSR Program Office (Level II)

- A NASA wide Program led by Ames Research Center in the heart of Silicon Valley
- Committed to supporting 21st century commercial space endeavors
- A bridge between the commercial sector and the research community

National Aeronautics and Space Administration



Science Technology Education

...Harnessing the nations entrepreneurial energies to fulfill our needs for access to space



Charles Miller

NASA HQ, Level I Program Manager Charles.Miller@nasa.gov

Mike Skidmore

CRuSR Level II, Program Manager Mike.Skidmore@nasa.gov

Dougal Maclise

CRuSR, Level II, Deputy Program Manager Douglas.C.Maclise@nasa.gov

Yvonne Cagle

CRuSR Level II, Program Scientist

Gregor Hanuschak

CRuSR, Level II, Business Director Gregor.Z.Hanuschak@nasa.gov

http://suborbitalex.arc.nasa.gov

COMMERCIAL

Re U_{SABLE}

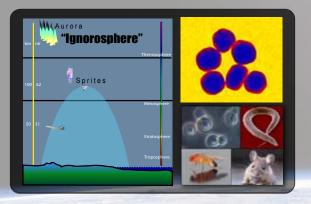
SUBORBITAL

RESEARCH

CRUSE

What would you do with 4 minutes in space?

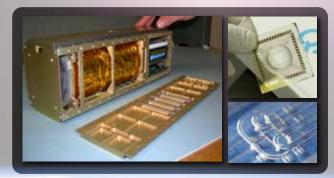
Science



- Space Life Sciences
- Microgravity Physics & Chemistry
- Atmospheric Sciences
- Planetary Science
- Human Biomedical Sciences
- Materials, Combustion, Fluids

NASA's CRuSR program enables a new generation of science by providing frequent access to a new region of space with user-friendly g-loads in a pressurized, temperature-controlled environment and payload accommodation from 1 to 100kg, soda-can sized to human sized. Short-duration flights will permit researchers to access payloads both pre- and post-flight.

Technology



- Innovative technology advancement and qualification
- Build a little, fly a little
- Rapid repeat, multiple flights enabled
- Daily flights possible
- Limits need for expensive ground test strategies

NASA depends on advances in technology, and yet, space testing and space qualification of promising technologies remains one of the most difficult of all NASA's hurdles. CRuSR will bridge the famed "valley of death" and help move technologies rapidly to maturity.

Education



- Inspiring to students from K to Post-Doctoral level
- Direct participation possible for unprecedented numbers of students
- Student developed payloads can fly in a semester
- Hands-on involvement
- Low-cost

Everyone can join in the fun. For the first time in its history, NASA has a Program that will allow a student to conceive of an experiment, develop it, fly it and analyze the data within standard educational timeframes.

Unleashing the Genius